REMARKS/ARGUMENTS

Claims 1-9 are active in this case. Support for the amendment to claim 1 is found in the paragraph bridging pages 5-6 of the specification.

No new matter is believed to have been added by these amendments.

The present invention is related to the analysis of genes and, in particular, expression of genes in prokaryotic organisms. It is common knowledge in the relevant art that expression of most genes, whether in prokaryotic or eukaryotic organisms, through messenger RNAs (mRNA). In eukaryotic organisms the mRNA molecules include what is termed a "poly A" tail, which is a sequence of adenine nucleotides that get added to the 3' end of the RNA. Therefore, it is common to use the poly A sequence as a target to selectively purify mRNA from total RNA extracts prepared from eukaryotic cells so as to enrich the population of mRNA molecules. By doing this, the specificity and sensitivity increases dramatically while substantially reducing background.

Moreover, as amended herein, the claimed method employs two primers that have a sequence complementary to the adapters and have an arbitrary dibasic sequence selected from A, T, G and Ca at the 3' end. As discussed in the specification, in the paragraph bridging pages 5 and 6, using such primers enables one to obtain, e.g., 256 types of primer sets and thereby groups of cDNAs obtained which can also be classified into, e.g. 256 types of groups. By employing such flexibility into the methods as claimed, one can analyze prokaryotic gene expression simply and accurately.

It is respectfully submitted that the art cited by the Office in the rejections set forth in the Official Action do not describe and, certainly, do not suggest the invention as claimed.

The rejection of Claims 1-3 under 35 USC 103(a) in view of Weissman patent (US 5,712,126), the Wendisch publication (*Anal Bioch* 90:205 (2001) and Murphy (U.S. PUB 2003/0175709 is not applicable to the claims as amended because this cited art does not disclose the method of detecting and classifying multiple cDNAs using the first and second primers as claimed. Rather, the art teaches to utilize specific primers to detect certain expressed genes in the samples analyzed.

The Wiesman patent teaches a method of forming cDNA from eukaryotic messenger RNAs and subsequent manipulations, including adapter ligation and PCR amplification. As correctly noted by the Office, however, Wiesman does not describe conducting such a method on prokaryotic mRNAs. Thus, the Office has cited Wendisch, who teaches adding poly A tails to prokaryotic mRNA and purifying the mRNA by selectively binding to the added poly A sequence on an oligo (dT) column. Neither Wiesmann nor Wendisch teach anything relating to removing rRNA from the sample prior to the subsequent method steps but for this cites to Murphy.

Neither Wendisch nor Murphy teach anything relating to the adaptor facilitated PCR reaction as claimed and therefore are left with the teachings in Wiesmann. In fact, Wiesmann teaches generating primers that are complementary to the Y region of the adaptor but not to the adaptor itself (see col. 3, lines 20-21). In the Examples, Wiesmann teaches specific primers to detect certain genes during differential growth and activation of Jurkat-type cells. The art would not have been modified to utilize the claimed methodology including the types of primers because Wendisch requires that primers be complementary to certain regions of the adaptor for the analysis of the specific genes being targeted.

Accordingly, withdrawal of the rejection is requested.

As to the rejection of which adds Belyavsky to the above cited art, this rejection is also not sustainable. Notably, much like Weissmann, Belyavsky does not disclose a method of classifying and detecting fragments but only detecting a single cDNA at a time. Indeed, while Belavsky discusses the use of arbitrary primer, they do so in the "Prior art" section and criticize this methodology as being no good 9see col. 2, lines 25-57). Therefore, one would not have modified the cited art to include the primers having an arbitrary dibasic sequence as in the claimed methods because the field and, in particular, Belavsky, would have dissuaded one from doing so.

Withdrawal of the rejection is requested.

A Notice of Allowance for all pending claims is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, she is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

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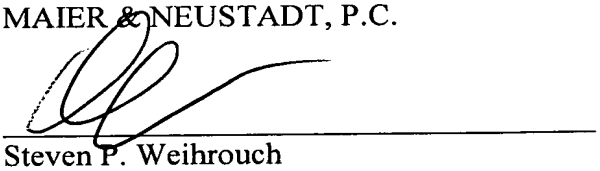

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